TEXTILE BULLETIN

VOL. 63

NOVEMBER 1, 1942

NO. 5

SAVE and SALVAGE

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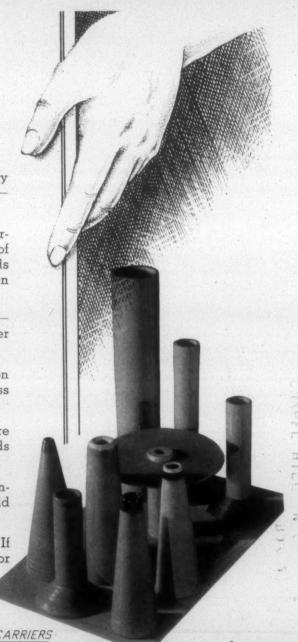
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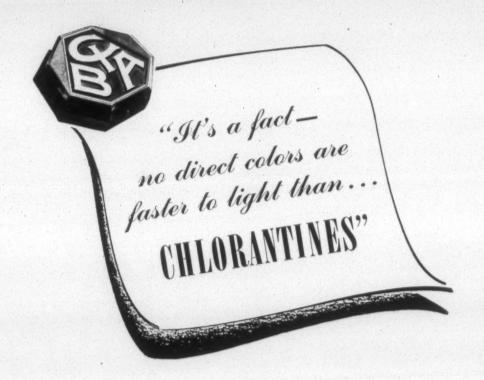
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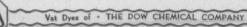




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Guest Editorial

By JOHN T. WIGINGTON, Director of Research
The Cotton-Textile Institute, Inc.

N EVER in the history of the cotton textile industry has been expressed such interest and enthusiasm in research as is shown today. The development of rayon, nylon, aralac, and other synthetic fibers, together with the fact that many imported fibers such as silk, flax, jute, and sisal are no longer available, are two important factors which are stimulating the research work being conducted by the cotton breeders, ginners, merchants, manufacturers and allied industries.

In an effort to meet the emergency needs of the nation, cotton manufacturers have found that many changes in their

methods of selecting and processing cotton have been necessary to produce the quantity and quality of yarns and fabrics required for military purposes. The industry has consumed approximately 12 million bales of cotton during the past year, as compared with six and one-half to seven million bales during a similar period of the first world war. This tremendous increase in production has been brought about with a third fewer active cotton spinning spindles than were in operation at that time. This accomplishment merits particular attention and demonstrates conclusively that re-

search and technical skill have been largely responsible.

The manufacturers of textile machinery, through their research and engineering departments, are aiding materially in the progress of cotton manufacturing. Equipment has been streamlined, speeded-up, refined and in many cases simplified. Briefly, these improvements include better opening, cleaning and blending machinery; better drafting, winding, spooling, warping and weaving equipment.

The chemist and the chemical industries have pursued vigorously a program of research that has resulted in changes in the characteristics of the raw cotton fiber, in new dyes, new bleaching agents, mildew-proofing preparatitons, permanent water-repellent fabrics and many other products commonly used today.

The textile schools, through their graduates, are playing an important part in the development of the research program in many of our mills. Graduates in textile chemistry and engineering, in textile engineering, in yarn manufacturing and in weaving and designing have brought to the industry much needed technical training and many new ideas

that have replaced rule-of-thumb methods heretofore practiced. The research laboratories of our textile schools are rendering a real service to the industry, particularly to those mills which have not yet established such research departments.

The Federal Government, through the Cotton Branch of the Agricultural Marketing Administration, the Bureau of Agricultural Chemistry and Engineering, through the Southern Regional Research Laboratory, the National Bureau of Standards and the Textile and Clothing Section of the Bureau of Home Economics, is doing a very thorough job of

establishing standards for many cotton textiles, as well as pursuing a fundamental program of fiber and spinning research. The Textile Research Institute, Inc., the Textile Foundation, the Southern Textile Association, the National Cotton Council and the Cotton-Textile Institute, Inc., and many private and public institutions are contributing much to the cotton research work being conducted in this country.

It is interesting to note that an increasing number of cotton manufacturers report today that their research departments are paying their way.

Aside from developing new uses, such research departments have accomplished many other notable achievements, especially in the field of selection. As a result of research, products used in manufacturing are being chosen on the basis of their proved superiority for a given use. The following are some of the outstanding selections in the textile industry with respect to quality and fitness to function:

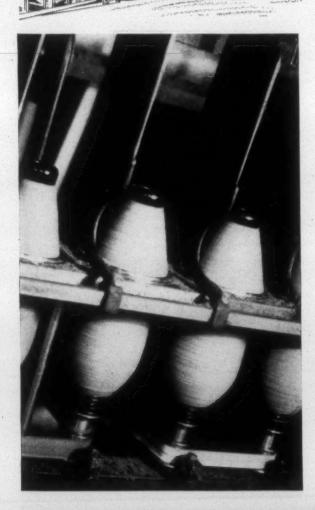
- Selection of cotton, resulting in not only a better product but better running work and a lower manufacturing cost.
- 2. Selection of oils and greases.
- 3. Selection of size materials, gums and starches.
- 4. Selection of repair parts.

Cotton manufacturers in the North and the South have found that their research laboratories are playing an essential part not only in supplying our armed forces with superior cotton products but in contributing to the health and comfort of society in general. Research laboratories in the textile industry are here to stay and will play an increasingly important role in the world of tomorrow.



etter Textile Machines After the War? OF COURSE, but for the Present-

OSE SPINDLES URNING



he tremendous impetus given to industry by an impelling necessity for production for war will be reflected in the post-war period in vastly improved processes and materials. The textile industry will unquestionably be bigger, better and stronger for the lessons learned during the war.

We in the textile machine business, too, are learning many new things which will help us to make better designed, better engineered and better built textile machinery.

During the emergency it is probably going to be very difficult for many mills to obtain new machinery because most of the energy and plant of machine builders are converted to the war effort.

For the present, therefore, we urge that existing plant be kept in condition to insure full operation at maximum production by regular check-ups for machine alignment and adjustment. Substitute new parts where they are needed, and before actual breakdowns occur. When this is done insist upon replacements made by the builder of your machines . . . the one most vitally interested that you shall get the utmost from his product.

WHITINSVILLE, MASS., U.S.A.

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TEXTILE BULLETIN



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No. 5



The Cotton Textile Industry's Problems and Needs

By DR. CLAUDIUS T. MURCHISON*

In the history of the cotton textile industry there have been three great crises which have had to be met by a pattern of common action. The first of these was brought about by World War I when the industry, through legislative authority, exercised over itself a production and price control through voluntary action and through an administration which was almost exclusively representative of the industry.

The second crisis was engendered by the depression of 1932-33, and again through legislative authority in the form of the N. I. R. A. the industry met the problem voluntarily and spontaneously through Industrial Code Number One.

The third great crisis precipitated by World War II has again called for a pattern of common action. There has, however, been a great difference between the methods used to set up the present pattern and those which have preceded it. Although the individual members of the industry have been accorded the full privilege to meet independently the emergency war requirements with all of the facilities at their command, and have been urged to do so, the collective voluntary procedures of past years have been denied.

Present Program of Control

The present program of control, whether it relates to production, prices, wage and hour policies, or the procurement of equipment and supplies, has in all its details been Governmentally imposed piece by piece. However, within the regulatory agencies of the Government members of the industry have been given posts of power and responsibility; and in the decisions which have been made other members of the industry, acting as committees without power, have been accorded advisory privileges.

The contrast is not made to imply criticism, but as testimony to the change of public and Governmental attitude toward industry. Whether this prevailing political philosophy of America is an expression of distrust of industry, or merely a more affirmative allegiance to the doctrine of direct powers I do not know. In either case we must accept it. Before all things is the imperative necessity of close ranks and forward action until the war is won, whatever be the pattern of control, and whatever be the philosophy supporting it.

But the contrast which I have made is worthy of mentioning because we must at all times be keenly conscious of its methods and principles. The history of a state is not made by a single crisis, and the ultimate shape of its thought and structure is determined by the spirit, and the loyalties, and the hopes which emerge from a distant past and penetrate into a remote future with no powers strong enough to break them.

Federal Control

Bearing always in mind this reservation, we welcome without fear and with distinct approbation the rapid extension of Federal control over manufacturing, distribution, price-making, wage practices, and all other major features of our economic life. To be sure, the innumerable rulings accompanying this spread of war-time control in order to be complied with spelled painful adjustments on the part of individual businessmen. But within our industry, as is no doubt the case with others, these adjustments have been promptly and thoroughly made, and so bespeak not only the wise judgment of the industry and its unusual powers of adaptation, but more eloquently its devotion to the national cause.

After the superhuman exertion of the past year the industry may be said to have reached its production crest. It is operating at a current cotton consumption rate of eleven and one-half million bales per year, and is employing approximately 520,000 workers. But during the past few months the industry has begun to feel the drain of its manpower. Employee separations are now somewhat larger than accessions, despite the great increase in wages and despite the industry's determined search for new

^{&#}x27;President's address at the 16th annual meeting of the Cotton-Textile Institute, Inc., New York City, Oct. 22, 1942.

workers among the less essential occupations and among those segments of the population in the textile area which are only casually employed.

The annual turnover rate for the industry as a whole is now in the neighborhood of 100 per cent, which reflects vividly the transiency of labor under present conditions. The industry has suffered heavy losses, as is to be expected, through the draft and through voluntary enlistments. To an even greater degree it has given up its manpower to the emergency war industries. These latter have drawn heavily upon the most skilled of the industry's workers, particularly those with mechanical training and experience. Happily, in certain departments of the industry, such as spinning and weaving, the work is suitable for women. Consequently it may be expected, within the months that lie ahead, that the percentage of women employees in the industry will grow very rapidly, and will eventually represent possibly as much as two-thirds of the total number of employees.

In certain areas of the industry the emergency labor situation now existent could be substantially relieved by waiving the 18-year age limitation for women, as contained in the Walsh-Healey Act. For some time the Department of Labor has had this question under advisement, and it is hoped that an early and affirmative decision will be made.

Voluntary Absenteeism

It is unfortunately true that within recent months voluntary absenteeism from the job has greatly increased within the industry, and from causes not associated with illness or accident, or any type of emergency. It is a matter of serious concern when it is necessary for cotton mills to have on the payroll from seven to ten per cent more employees than are normally required in order to keep the machinery running.

Seventy per cent or more of the industry's unfilled orders carry a priority rating of A-10 or better. The bulk of these are for the direct use of our armed forces. All of them are essential to the total war effort. Consequently it would seem as if a program of education acquainting the employees of the industry with the vital importance of their work, if persistently carried on, would be of great benefit. There is no doubt whatever of the patriotic devotion and unlimited loyalty of those who operate the machinery of textile production. But there is evidence from all quarters that many of them do not feel that they are engaging directly in the battle for victory.

The industry has already begun to feel the pinch of inadequate supplies and machinery replacement, although in these respects it has not suffered nearly so much as many other industries. It is inevitable that the procurement of equipment and repair parts will become more and more difficult as the building of ships, tanks, airplanes and guns becomes more rapid. Every item in the mill inventory of repair parts, and all material in the mill machine shop will soon be worth their weight in gold. Every cotton mill, if it is not already doing so, will soon be nursing tenderly its every machine as if it were a diamond studded watch, because only in this way can the industry's production efficiency be maintained.

Because of the scarcity of container material the problem of packaging goods for shipment will become more acute. Experimentations should begin at once to develop new methods and materials incident to the shipment of yarns and fabrics. Transportation and storage facilities are bound to become more limited. In regard to each of these the utmost foresight which can now be exercised will be none too early. From all points of view it can be said unreservedly that the industry is facing a year of operating problems more harsh than it has previously known

From the standpoint of production allocations and loom conversions it is probable that the major adjustments have already been completed. At any rate no changes of importance are now apparent or anticipated in the near future. One cannot speak so confidently of the outlook regarding price ceilings, although even here it is possible that the bulk of price schedules have been definitely established.

A major objective of this war is the maintenance of our economic structure and the principles through which it is to operate, and one of the bulwarks of our economic structure is the varied activity and the pervasive income which emanate from the commodity cotton. Its growth, its manufacture, its distribution are the chief sources of livelihood of some 12 or 15 million people.

If substitute commodities are destined to come along which are superior to cotton all of us recognize that cotton must fall. But these substitute commodities, if they are to succeed, will do so from scientific research and sales promotion. They do not yet have a substantial advantage, but no one doubts that such an advantage will be striven for.

To hold its own all that cotton needs is the benefit of these same forces—scientific research and sales promotion. In terms of our knowledge of the fiber itself and the potentialities involved in its processing it is my belief that cotton is in the first stages of scientific study and experimentation. Research devoted to it promises richer rewards than research on any other single organic substance.

But in the case of cotton the rewards are coupled with a grim and absolute necessity. This necessity is no less real because it is timed to strike us within a period of two or three years after the war is over. After the conflict there will of course be hundreds of millions of people to the East and the West whose nakedness will clamor for clothing. There will be millions of desolate homes to be refurnished; there will be hundreds of thousands of factories in every nation begging for cotton, either as part of their equipment or as raw material for their products.

Future Cotton Surplus

But that phase will be transient. The world will eventually settle into a new normal. The cotton surpluses under the pressure of expanded acreages of Brazil, India, China, Africa, Egypt and Russia will surge into the world market place. Unless we can maintain our domestic consumption at or near the present level we too shall have a cotton surplus which must be pushed into the world market.

If the parity price of cotton is maintained, and I hope it can be, this surplus can be exported only by means of a subsidy. Judged by international values as they now exist, this subsidy may well be as much as ten cents a

(Continued on Page 34)

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There Will Always Be a Textile Industry*

THERE will always be a textile industry. The art of weaving was developed early in the history of civilized man. The Industrial Revolution centered around the textile industry when spinning jennies and power looms displaced the hand work of countless individuals. In the present struggle the textile industry is recognized as being essential to the war effort; with the return of peace it is certain that textiles will be continuously in demand.

Yes, there will always be a textile industry. This to some may mean that there will always be a cotton-textile industry. But let me point out to these people a number of instances where a well-established industry has been completely revolutionized. Take the indigo industryindigo was at one time collected from plants by thousands of underpaid laborers and in small yield until the chemist Baever, in 1882, synthesized the compound in his laboratory. In the year 1935, as a result of his discovery, over 7,000 tons of synthetic indigo were used in the United States alone. A more recent example in the case of silk, which was produced from the cocoon by using Japanese laborers whose average wage was a few cents a day. The yield was small and the ultimate cost of the product was high. Now, the synthetic, nylon, quite adequately fulfills the uses of silk, and natives formerly dependent on the silk worm for a livelihood may as well look for a new occupation in the face of mass production methods. This is true also for the rubber industry, which will never go back to complete dependence on nature and low-priced labor for its raw material. In this instance it was a fact that because of very low wages paid for collecting the latex, the price of the crude product was so low that the newer synthetic methods could not compete. The emergency has now forced us to build up our synthetic industry, and the natural rubber will have to compete on equal footing as to price and quality when production is established and peace finally comes, for the course of mass production methods has always been toward a better product at a constantly decreasing price.

"Cotton Is No Longer King"

These examples should be sufficient warning that "it can happen here," within the boundaries of our own economy, and that any fiber, whether it be cotton or some other, that is to be used in the textile industry must meet the requirements of physical properties and cost. Cotton is no longer king. Cotton can no longer depend upon its ancient and romantic history for prestige. It must stand on its merits alone.

Before the year 1920, the American textile industry employed only the natural fibers-cotton primarily, then wool, silk, linen, hemp and jute. Excluding from consideration hemp and jute, the cotton consumption in 1938 was 81 per cent of the total poundage, the consumption of rayon was 9 per cent, of wool was 8 per cent, with silk amounting to only 1.5 per cent of the total. This lusty newcomer rayon, only recently having attained its majority in the American textile industry, is right now second in the field of total poundage, and its general significance is greater than these figures indicate. It has entered into the dress goods industry; it dominates the underwear industry; it is being used extensively for hosiery, for sportswear, and even is being used in mechanical fabrics. It affords interesting decorative effects for incorporation into drapery material and upholstering. Originally designed as a cheap substitute for silk, its versatility, usefulness, and eventual cheapness has led to its competition with cotton in numerous fields, especially since the development of rayon stapled fiber.

Adequate production figures are not available on nylon, but its story and significance are well known. It is being used in place of silk in parachutes, has been used with conspicuous success in hosiery, and its ultimate utility appears to be limitless. This product of the test tube in certain characteristics has improved on nature.

Other Fibers

Vinyon and its close relative, saran, are additional contributions of high-polymer chemistry to the textile



field. Fabrics from these materials are decorative, waterproof, and resistant to acid and alkali. They are used in insulating materials, in filter fabrics, and in upholstering. When the coming peace releases from strategic war needs the polyvinyl polymers from which these fibers are made,

^{*}An address delivered by P. N. Collier, vice-president and director of research, Callaway Mills, LaGrange, Ga., at the annual convention of the Cotton-Textile Institute, Inc., Oct. 22, 1942.



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we may be certain that a marked expansion in volume of such fibers will take place.

The protenoid fibers such as those derived from milk, soybeans and peanuts were originally developed as a substitute for wool. They are now being used as diluents for wool in blends, but the technology of these fibers has not been sufficiently advanced so that they may be considered as wool replacements. We cannot know at present the volume of production, but we can say that it is steadily increasing.

The relatively recent development of a fiber from glass has afforded an excellent material for electrical insulation and for fireproof fabrics, and further progress is being made with this material.

There is a principle in the foregoing examples that will vitally affect the future of the cotton business: The growth of the synthetic fiber industry is the result of a real need-fibers having definite desirable properties have been produced for a given purpose. Further, the synthetic manufacturing process may be altered to produce a fiber which emphasizes a single given property, thus making the fiber. "tailor-made" for a specific purpose. For example, the diameter of the synthetic fiber may be made fine or coarse as the needs demand. It can be made in continuous lengths or stapled to any desired length, it can be made with or without luster, it can be made to have a round cross section or a serrated cross section; it can be made of normal strength or by stretch spinning to have a higher tensile; it can be made with crimp or without crimp. Truly then it can be said to be a "made to order" fiber. The continually improved position of the synthetic fiber industry is the direct result of progress made in the preparation of a uniform fiber and in fabrication from the fiber, and this progress has been accomplished through unceasing research.

Rayon's Progress

Let us be specific: the first rayon manufactured had very poor physical properties and had to undergo much technological development before it attained its present favorable characteristics. The first field that rayon entered extensively was dress goods, where its smoothness and soft hand were very desirable properties, and where it was a popular novelty. From this as a beginning, the rayon technologist developed a fiber that was not only silk-like in appearance, but had increased strength and therefore could be used in other fields. Having done well in these first fields of style and apparel, the rayon manufacturers have cast more than covetous glances at the extensive mechanical and industrial markets for textiles. of which the tire cord trade is an outstanding and currently notable example. Whether by design or accident, they appear to have surveyed the most extensive and lucrative markets possessed by cotton manufacturers and by diligent research to have developed a fiber that would be most suitable for those markets.

Let there be no misunderstanding: these statements imply no resentment against the synthetic fibers—they have earned their present place by right of conquest and have been a real contribution to society. The synthetic fiber industry is here and here to stay because it fulfills a definite need and does it well.

Now that we have noted the development and growth of synthetic fibers, let us consider the cotton fiber. Cotton possesses certain inherent advantages over other fibers, synthetic or natural, which account for its present predominance in the textile field. It occurs naturally in a fiber form, whereas the synthetic material must be fabricated into fibers. It occurs as a rather pure form of cellulose, while the cellulose in wood, which is the largest source used in rayon manufacture, occurs along with lignin, a very troublesome substance. Cotton's relative purity affords great stability-it is relatively insensitive to ordinary degradative influences. It is independent of temperature effects, being flexible at low temperatures and remaining so at high temperatures without becoming plastic or fluid. The great tensile strength of the fiber is well known; the wet strength of the yarns and fabrics made from cotton may be envied by most other fibers. The cotton fiber itself possesses the flat, ribbon-like structure of a collapsed cylinder, with convolutions along the surface, which naturally enhance its spinning qualities. Cotton has highly favorable flexing properties and fabrics made with this fiber offer good resistance to abrasion.

A Superior Raw Product

Why do I mention all these desirable properties of the cotton fiber? Simply to show that the cotton textile industry has had a superior raw product with which to work all along, that the present position of the industry is due almost entirely to this fact alone, and, most important of all, that these outstanding attributes make a splendid starting point for research work.

Let me add immediately that the cotton industry as a whole has assumed a lethargic attitude and has paid little attention to improvement in the cotton fiber itself so that it might meet the demands of the trade and the competition of the synthetic fibers.

Cotton has been in a favorable economic position with respect to synthetic fibers. This in part is due to the fact that the cost of producing the two types of fibers has not heretofore approached comparison. Fortunately, the seed of the cotton fiber is a by-product which is a rich source of oil and nitrogenous material. The linters from around the seed compose the raw material for cellulose acetate and for nitrocellulose which is used in lacquers and guncotton. These well-developed by-products account in part for the low cost of the raw material, and should help the fiber remain in a competitive position with the newer fibers.

Of course, the cotton textile industry had rather continue using cotton—tradition, sentiment and experience all make us favor cotton. But we must face the fact that if the synthetic industry furnishes us with a fiber which more adequately fulfills a given need, we can rather easily convert our productive equipment to handle this raw material. For example, most cotton mills can process staple rayon with few, if, any, changes. It is therefore incumbent upon the entire cotton industry, from the breeders on through the sales organizations, to face this situation. If serious economic losses and social dislocations are to be avoided, a sustained program of co-operation and research will have to be accomplished.

The program of action must be comprehensive, extending from the cotton field right up to the ultimate consumer of the goods.

(Continued on Page 36)

Scarcities Are Forcing

SAVINGS ON PICKING-MOTION PARTS

By H. E. WENRICH PART TWO

SALVAGE of slightly worn parts should be the watchword of all maintenance men. It applies to practically every part on, or going onto, any machine along the production line. Usually a great deal of discarded parts are thrown away which show but slight wear. And many of these parts discarded long before their usefulness have been used completely. This assertion is often apparent in the frequent call for sweep straps and sweep sticks replacements, especially in sections where fixer-learners are cross-shifting. Older fixers often add additional life to these parts by giving attention to a few tricks they have picked up through many years of experience.

Do you know that adding a short rivet or stove bolt to one end of a sweep stick will add months of life to the stick? Many types of sweep sticks having one rivet in front of the pick-arm bolt hole can be improved by the addition of an added rivet. Use washers on both sides, and mushroom the rivet firmly to prevent loosening during loom operation (see Figure 4).

Another trick, often overlooked, is slightly enlarging the pick-arm bolt hole before placing a new stick into work. Many sweep sticks are purchased with the hole just large enough to allow the bolt to pass through. As the loom picks, there is noticeable side swing to the sweep stick at the pick-arm end. This action causes the sweep stick to bind, or the picker in the shuttle box to bind, often resulting in loom bang-offs. Occasionally, the sweep stick will split out from the bolt end, requiring another new replacement. By filing the hole slightly larger than the bolt diameter to allow free movement, the chances of sticks splitting due to binding can be eliminated.

Study Point of Bind

Another somewhat similar happening takes place if the picking arm is too far back on the pick shaft, or the pick shaft is too far in front, causing the arm to bind on the lay sword as the lay swings forward and the pick takes place. If binding occurs, study the point of bind and fix correctly before starting the loom. This will often prevent a break within a few minutes after placing on some new part. It would be a pleasure if, after installing a new part, a fixer could pull the shipper handle and the loom would function without trouble. But, unfortunately, such is not to be had. Fixing takes years of practice and study,

and even after years of everyday work, a fixer can still keep on learning new tricks.

At the pick-stick end of the sweep stick the small sweep-strap bolt-hole can be enlarged with a half-inch drill to take a larger bolt size. Smaller diameter bolts are easily stripped at the thread end, and are a constant source of loom breakdowns. Heavier looms in the wide-loom class of 82-inch widths and over, should have a still larger bolt at this point. Heavier bolts for this purpose will outwear several light bolts and save in both time and material.

Another trick some fixers have used to good advantage is to shorten some few sweep sticks by cutting an inch or so off the sweep strap end and drilling in a new bolt hole. The purpose of this is to secure added pick on looms giving constant trouble from a short stroke. Do not undertake this fix on all looms in the section, as looms of the same model should measure nearly the same at the sweep length. On Draper looms, the measurement from the pick-arm connection to the inside surface of the sweep strap contacting the power strap is approximately eight and one-half inches, more or less, according to model. Crompton & Knowles looms measure 13½ inches, more or less, according to model. And in shortening this length,

JERKER STRAPS

V CRACKING STARTED

frequent trouble may be the result. If all other adjustments, according to measurement, fail to give the correct sweep measurement, the foregone trick is reported to.

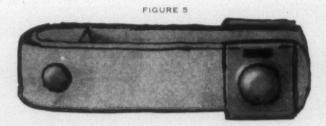
Canvas sweep sticks often fail to give a good pick, and if they show too much stretch when power is applied on the pick, they should be discarded for new replacements.

Many fixers have eliminated loom bang-offs due to a weak pick by simply installing a wood sweep stick after removing a canvas sweep stick.

Jerker straps can be repaired if snapped off near the center or the loop end by splicing with good leather. However, these straps are not too expensive if of canvas construction, and the time lost in repairing plus the leather cost may be more than the cost of a new strap. It is advisable therefore to keep a supply of these straps on hand. If the hole ends on some jerker straps are torn free, and a good grade of discarded leather is available, they can be repaired by cutting off the torn end and riveting the leather further back, making a new hole. This can be done with looms requiring shorter straps.

An important suggestion on purchasing jerker straps as well as sweep straps, etc., is to secure the right size strap for the loom requirements. In many instances, an oversize strap is stronger than a casting, and should a picking cam, point, ball or shaft bind and jam, a more expensive part often breaks. It is but a matter of a few moments to replace a broker sweep strap or jerker strap. It may take an hour to replace and adjust an expensive casting. Undersize parts should also be avoided. If a fixer must continually be rushing around his section placing on broken strapping, something is surely wrong. Investigation may show that the straps are either weak or undersize.

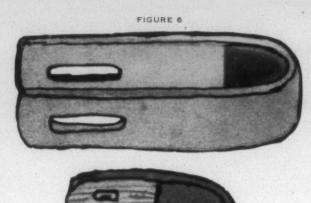
Perhaps most ingenious of all simple ideas which help the fixer is that shown in Figure 5. Note the square, sweep-strap bolt washers. The writer has witnessed many sweep straps ruined through the lack of these washers.



Round washers dig into the canvas or leather, tearing out the ends, and softening up the material. Quite often, the sweep sticks pull forward, especially if the sweep is choked, and gives plenty of trouble. Everything appears satisfactory, and a fixer-learner puzzled as to the reason of the loom breakdown often complicates his task by adjusting here, there and everywhere. Time after time he will be back until the proper fix has been finely made. These washers with the right sized bolt will keep an adjustment for many months. Occasionally, fixers in making the most of what they have on hand may find it necessary to cut the washers from flat strip steel usually found in the plant's salvage bin.

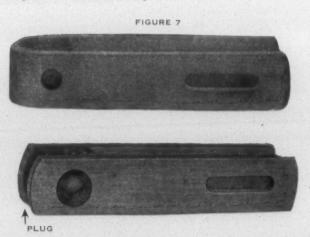
If the sweep strap should happen to show wear along the bottom, the strap can be turned upside down and still give many months of wear. If wear is noticed, check the pick and especially the back-lash of the pick arm, etc., as it returns to normal. The space between pick stick and sweep strap may be too great, allowing a sloppy movement and wearing out parts. Here is another reason why fixers should check carefully sweep measurement. Sufficient play should be allowed—only to prevent binding.

If wear appears on top, too much play may be between the power strap ears. Keep the strap tight and just sufficient play between the upper and lower ears to keep the sweep strap in place. Another reason for excessive wear



near the bottom can be found in the practice of riveting power strap plying together instead of stitching. The rivets, if too close to the outer edges of the ears; quickly cut the straps to uselessness. Don't throw the straps away; merely punch out the faulty rivets.

Some sweep straps can be repaired by placing soft leather over the ragged leather that is wearing away. Figure 6 shows two types of canvas construction. Fixing these straps is but a temporary fix and should not be resorted to unless the straps are difficult to procure. The longer straps can occasionally be renovated into shorter straps by cutting off the damaged ends, if holes are torn free, and replacing bolt holes back further. This fix can only be worked satisfactory where weave rooms have va-



rious width looms. The supply room foreman passes judgment on all such repairs, and such repairs are undertaken when time is less pressing.

Figure 7 illustrates the remarkable hickory sweep strap that has proven its worthiness over a period of years. The writer knows of such straps lasting better than three

(Continued on Page 38)

Cotton-Textile Institute Officials Are Elected

Dr. Claudius T. Murchison was re-elected president of The Cotton-Textile Institute at the annual meeting of the board of directors, held in New York recently in conjunction with a gathering of the Institute's membership. Paul B. Halstead continues as secretary-treasurer.

Herman Cone, president of Proximity Mfg. Co., was elected vice-president for the South.

Among the directors elected to serve three-year terms

W. N. Banks, Grantville Mills, Grantville, Ga.; S. Marshall Beattie, Piedmont Mfg. Co., Greenville, S. C.; M. L. Cates, Arkwright Mills, Spartanburg, S. C.; Hugh M. Comer, Avondale Mills, Sylacauga, Ala.; R. D. Hall, Stowe Thread Co., Belmont, N. C.; C. E. Hatch, Brandon Corp., Greenville, S. C.

W. H. Hightower, Thomaston Cotton Mills, Thomaston, Ga.; L. L. Jones, Canton Cotton Mills, Canton, Ga.; Walter S. Montgomery, Spartan Mills, Spartanburg, S. C.; R. C. Moore, Rhodhiss Mills Co., Charlotte, N. C.; A. G. Myers, Textiles, Inc., Gastonia, N. C.; J. T. Phillips, Buck Creek Cotton Mills, Siluria, Ala.

L. D. Pitts, Industrial Cotton Mills, Rock Hill, S. C.; T. Scott Roberts, Adelaide Mills, Anniston, Ala.; Scott Russell, Bibb Mfg. Co., Macon, Ga.; W. A. L. Sibley, Monarch Mills, Union, S. C.; W. L. Steele, Brazos Valley Cotton Mills, West, Tex.; George P. Swift, Muscogee Mfg. Co., Columbus, Ga.; F. C. Williams, Roanoke Mills Co., Roanoke Rapids, N. C.

Benjamin C. Russell of the Russell Mfg. Co. of Alexander City, Ala., was elected to the board for one year.

A. G. Myers of Textiles, Inc., Gastonia, N. C., and William N. Banks of the Grantville Mills, Grantville, Ga., were elected to the executive committee for three-year terms.

S. M. Beattie Is Honored

PIEDMONT, S. C.—Paying tribute to S. M. Beattie, president of the Piedmont Mfg. Co., approximately 500 citizens of Piedmont gathered at the Hotel Hill Oct. 25 for a celebration honoring the birthday of the mill official.

With employees of the plant and Dr. William P. Jacobs of Clinton as speakers, the group heard the honor guest praised for his work as one of the leading mill men of the Piedmont section of South Carolina.

Pointing to the loyalty of Mr. Beattie to the community and the ever-expanding program which he had pushed in co-operation with his workers, Dr. Jacobs, president of Presbyterian College and executive vice-president of the Cotton Manufacturers Association of South Carolina, expressed the high esteem in which he was held by all who knew him.

Miller Adds Burkart-Schier Products

Byrd Miller, well-known manufacturers' agent of Greenville, S. C., has added the Burkart-Schier Chemical Co. to his line, which also included such items as Cutler spinning tape, plastic sheaves and other textile mill supplies.

Maritime Commission Honors Whitin Machine Works

WHITINSVILLE, MASS.—The Whitin Machine Works, manufacturers of textile machinery in normal times, received the following telegram Oct. 22:

"As chairman of the U. S. Maritime Commission Board of Awards I take pleasure in advising you that the board, in recognition of your outstanding production achievement, has awarded your plant the Maritime 'M' pennant, the Victory Fleet Flag and Maritime Labor Merit Badges for all your workers."

Signed: H. L. VICKERY, Commissioner

U. S. Maritime Commission

Public ceremonies will take place at Whitinsville Nov. 7, with the awards to be presented by C. E. Walsh, Jr., chief of the procurement section, U. S. Maritime Commission. Guests will include state and Federal officials and representatives of the armed services.

The Maritime "M" burgee has been awarded to only one other New England firm, and to very few industries elsewhere thus far. This recognition is a result of quantity production of vertical auxiliary engines for the Victory Fleet.

Cotton Consumption in September Is 966,149 Bales

Washington.—The Census Bureau reported cotton consumed during September totaled 966,149 bales lint and 114,537 bales linters, compared with 925,089 and 122,138 August this year, and 877,971 and 129,608 September last year.

On hand Sept. 30 was reported held as follows:

In consuming establishments, 1,812,204 bales lint and 337,317 linters, compared with 1,949,295 and 353,859 on Aug. 31 this year, and 1,635,413 and 445,030 on Sept. 30 last year.

In public storage and at compresses, 9,724,038 bales lint and 71,123 linters, compared with 7,546,268 and 85,049 on Aug. 31 this year, and 11,526,209 and 79,075 on Sept. 30 last year.

Cotton Ginning Still Ahead

Washington.—The Census Bureau reported Oct. 26 that cotton of this year's growth ginned to Oct. 18 totaled 8,183,839 running bales, counting round as half bales and excluding linters, compared with 6,857,017 bales a year ago, and 7,027,189 bales two years ago.

Ginnings by states, with comparative figures for a year ago, follow:

Alabama, 727,057 and 668,877 a year ago; Arizona, 28,259 and 54,944; Arkansas, 936,274 and 1,026,405; California, 32,982 and 66,022; Florida, 13,124 and 13,770; Georgia, 685,586 and 532,039; Illinois, 2,579 and 3,983; Kentucky, 10,018 and 12,344; Louisiana, 495,786 and 277,594; Mississippi, 1,457,609 and 1,197,129; Missouri, 289,069 and 357,857; New Mexico, 24,585 and 17,798; North Carolina, 396,857 and 397,231; Oklahoma, 332,768 and 231,564; South Carolina, 524,021 and 324,839; Tennessee, 387,621 and 1,211,778; Virginia, 11,055 and 11,562.

Mill News

Greenville, S. C.—A number of houses owned by the Judson Mills are being painted and remodeled. The repairs include new plastering and flooring.

SUMMERVILLE, GA.—Summerville Mfg. Co. reports 92.8 per cent of its employees are participating in the 10 per cent wage reduction plan for the purchase of war bonds.

McAdenville, N. C.—Stowe Mills, Inc., has been awarded the "Minute Man" flag by the Treasury Department. The plant has approximately 500 employees, 90 per cent of whom are participating in the war bond payroll plan.

BIBB CITY, GA.—The opening session of the Bibb Vocational War School was held Oct. 13 under the direction of J. R. Jolly, director. The school is sponsored by the Muscogee County Board of Education. Day and night classes will be held to accommodate workers on all shifts.

Burlington, N. C.—The Mayfair Mill, part of the Burlington Mills Corp., has been awarded a plaque by the Liberty Mutual Insurance Co. for having attained two million man hours without a lost-time accident. The Mayfair plant has not had a lost-time accident since November, 1941. John F. Eastham is superintendent.

LURAY, VA.—The Luray Textile Corp. has begun work on an addition to its plant. The work is being done by D. B. Coffman and is estimated to cost about \$20,000.

The addition will be used for storage space, freeing an equivalent area in the main plant for installation of new equipment. This will permit the employment of 50 or more persons.

WOODRUFF, S. C.—The celebration of the attainment of 100 per cent of the operatives at the Brandon Corp. purchasing United States war bonds with at least 10 per cent of their weekly salary and honoring 44 men who have joined the armed forces of the nation was attended recently by 1,000 people from Woodruff and nearby communities.

GREENVILLE, S. C.—Five textile plants in the Greenville area are now transporting employees to and from their work by bus as a tire-and-gasoline-saving move inaugurated in recent weeks. The Union Bleachery, Slater, Judson, Southern Worsted and Monaghan Mills are bringing workers from the surrounding area into the city in order to assist in conserving automobile necessities now being rationed.

Six buses are now in use, covering a distance of from 140 to 170 miles daily in the transporting of employees to work and back to their homes.

Sylacauga, Ala.—The U. S. Treasury Department in recent ceremonies awarded a "Minute Man" and "T" flag to Avondale Mills in recognition of the fact that the concern's 7,470 employees in its seven plants are devoting 10 per cent or more of their income to the purchase of war bonds.

GASTONIA, N. C.—The Parkdale Mill in West Gastonia, with 366 employees, has the distinction of being the first mill in the Gastonia area and the second in Gaston County to report 100 per cent of its employees co-operating in the voluntary payroll deduction plan of war bond purchases. The mill received a Minute Man flag from the U. S. Treasury Department.

Asheville, N. C.—Women employees of the American Enka Corp. are now being accepted for night work on the 11 p. m. to 7 a. m. shift. The working of women on the "graveyard shift" is not compulsory. It is a volunteer proposition, but many of the women are making the change because they are allowed the five-day week, getting Saturday and Sunday off.

Shawmut, Ala.—A medical department of the West Point Mfg. Co. has been established with offices here. Dr. Paul V. Auston has been employed as full-time director of the medical department, which will serve West Point employees in Riverview, Fairfax, Langdale, Shawmut and Lanett. Chattahoochee Valley residents are now looking forward to the post-war construction of a hospital between Langdale and Shawmut, following the donation of \$125,000 and the land for a building site by the West Point Mfg. Co. and the Lanett Bleachery and Dye Works.

Spartanburg, S. C.—Drayton Mills has contributed 60 tons of scrap metal, including considerable quantities of copper and brass, according to J. T. Wardlaw, treasurer. Employees recently collected 9,970 pounds of scrap and a large amount of rubber from their homes.

More than 90 per cent of the plant's 1,650 employees are participating in the payroll deduction plan for war bond purchases. Allotments for war bonds total 11.6 per cent of the gross payroll.

The plant is now on 57 per cent war production.

Brevard, N. C.—The installation of six more cards at the Pisgah Mills here has increased production of the plant's thread for Army and Navy uses approximately 20 per cent, W. M. Melton, vice-president and general manager, states.

During the last two years that Mr. Melton has been in charge, the Pisgah plant's production has increased steadily and 185 workers are now employed. Around 85 per cent of its output of fine quality thread today goes to war purposes. The company is also making plans to open a mercerizing plant.

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Personal News

A. B. Hammond is now superintendent of the Berryton Mills, Berryton, Ga.

John Foster of the Odell Mill Supply Co. staff, Greensboro, N. C., was recently elected vice-president of the North Carolina Junior Chamber of Commerce.

Allen F. Johnson, president of the Florence Mills, has been confined to a hospital at Greenville, S. C., following a leg operation.

David W. Bumgardner, superintendent of the Eagle Yarn Mills, has been elected president of the Kiwanis Club of Belmont, N. C.

R. P. Hall has been promoted from second hand to overseer of the cloth room at the Jefferson (Ga.) Mills No. 1 plant.

Alfred J. Haselden, formerly a sales engineer for the Norlander Machine Co. of Gastonia, N. C., is now an Army Air Corps aviation cadet at San Antonio, Tex.

V. J. Thompson, for the last six years superintendent at the Rushton Mills, Griffin, Ga., has accepted a similar position with the Laurens (S. C.) Cotton Mills.

Carl Richardson has been promoted to general manager of the Rushton Mills, Griffin, Ga., in addition to his present duties as secretary of the company.

John Tillett, treasurer of the Leaksville Woolen Mills at Homestead and Spray, N. C., has returned to work after an illness of several months.

T. D. Hancock of Gaffney, S. C., formerly a sales representative for the Southern Loom-Reed Mfg. Co., Inc., is now serving with the Army Air Corps at Craig Field, Selma, Ala.

Charles A. Cannon, president of Cannon Mills, Kannapolis, N. C., was the speaker at a recent "Father and Son" supper sponsored by the Men's Club of China Grove, N. C.

Ralph. O. Warnken has joined the credit department of Riverside and Dan River Cotton Mills, Danville, Va., to work with L. H. Browder, credit manager, and J. L. Kaiser, his assistant.

Lieutenant Thomas C. Ragsdale, formerly with the Oakdale Cotton Mills, Jamestown, N. C., was married to Miss Margaret Hanes Hill of Greensboro, N. C., recently. Lieutenant Ragsdale's father, the late William G. Ragsdale, was president of the Oakdale Cotton Mills.

Spencer Love, president of the Burlington Mills Corp., Greensboro, N. C., has donated \$10,000 for a chapel at the Woman's College of the University of North Carolina.

Will N. Robbins, of the rayon fabrics division of J. P. Stevens & Co., has reported for active duty at Camp Lee, Va., as an Army first lieutenant.

T. B. Reynolds has accepted the position as superintendent at the Oconee Textile Co., Whitehall, Ga. He formerly held a similar position at the Berryton Mills. Berryton, Ga.

C. Harold Poovey, formerly affiliated with the Greensboro (N. C.) Loom Reed Co. as sales representative, has been accepted by the armored forces of the U. S. Army as an officer candidate and will report for duty Nov. 12.

Eddie E. Jones, Jr., formerly connected with the Johnston Mfg. Co. offices at Chattanooga, Tenn., and Charlotte, N. C., has been advanced to the rank of staff sergeant at the Olympia Army Air Base, Olympia, Wash.

James H. Matthews, cotton buyer for the Gaffney (S. C.) Mfg. Co. for 14 years, has moved to Spartanburg to become associated with Spartan Mills, but will continue to work part of time with the Gaffney firm.

Z. G. Willis, director of vocation work at the Greenwood (S. C.) High School for several years, has resigned to accept a position with the Inman (S. C.) Mills and Riverdale Mills at Enoree, S. C.

Lieutenant Bernard Bram, formerly assigned to the inspection section, procurement division, of the Philadelphia Army Quartermaster Depot, has been transferred to the depot at Charlotte, N. C.

Frank R. Simmons has been elected secretary of the Mauney-Steel Co., Kings Mountain, N. C., at a special meeting of the directors. Benjamin D. Glenn, head of the company's New York sales office, was made a member of the board of directors.

James D. Hammett, treasurer of the Chiquola Mfg. Co., Honea Path, S. C., has been commissioned a second lieutenant in the Army Quartermaster Corps. Lieutenant Hammett will assist in the procurement of cotton fabrics at the QM clothing and textile branch in Washington.

W. H. Richardson, assistant treasurer of the Acme Loom Harness and Reed Co., has been appointed commander of the Greater Greenville (S. C.) Citizens' Defense Corps to succeed R. W. Arrington, president of Union Bleachery, who resigned but will continue to aid the organization.

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Broken Parts Are Discussed at S.T.A. Piedmont Section Meeting

BROKEN textile machinery parts drew the major share of attention at the fall meeting of the Southern Textile Association's Piedmont Section, held Oct. 3 at the Hotel Charlotte, Charlotte, N. C. The first part of the stenographic report of broken parts discussion was presented in the Oct. 15 issue of Textile Bulletin. The sectional chairman, B. M. Bowen, superintendent of the Salisbury (N. C.) Cotton Mill, was in charge. The first portion ended with a discussion of gear maintenance. It continues:

Mr. Clark: What is the effect of running a steel gear against a cast gear?

CHAIRMAN: As long as they are in good condition, that's all right. Mr. Corn, could we hear from you at this time?

J. O. Corn: I find that the greater percentage of breakage is caused by the lack of proper fixing.

You realize, I am sure, the shortage of efficient help at this time. I know you all have lost a great many of your better men—you have lost a lot of your men out of your mechanical department—and unquestionably our supply cost is going up due to those two causes. Just how we are going to get out of it I don't know. I see my supply cost going up every month. The type of mechanics and the loom-fixers that we are able to get is not what it used to be, and this shortage of good men is certainly hurting our machinery.

When it comes to patching our loom parts we don't try to do that. It can be done if you are properly equipped for it but, as you all know, so many of our shops are not properly equipped for that type of work.

I think we are not getting the type of supplies that we used to get. The material is not quite as good as it was formerly, particularly on the cast iron parts. That may be due to the improper material in the casting—I won't say—but anyway it seems to me that we are using more poor quality parts than we used to.

CHAIRMAN: Mr. Bozeman of the Whitin Machine Works is here with us and I will call on him. Mr. Bozeman, can't you throw some light on this subject?

Mr. Bozeman: Mr. Chairman, I think that the cause of excessive breaking in textile machinery is usually due to two things: improper application of the part or vibration.

The parts that are made by machinery companies, of course, are planed off in the shops to a flat surface and they are supposed to be interchangeable and are to a certain extent. But if every fixer in a mill would learn to file and fit like erectors who install the machinery do and

take out all of what we call the rock in a casting and make it fit perfectly it would solve the problem to a large extent. If the part has a stud attached to it, that stud should be exactly in line with the part which it fits on. It should be filed and fitted; if it is not, it throws the part into a strain, a twist, and any undue load on it will cause it to break.

Another thing: vibration causes a lot of parts to break, particularly roll necks. We have a good many rolls that come into our shop on which the necks have been broken off. The main reason they broke was because they were not imbedded properly and was not fitting the bearing, and as it revolved it was constantly binding.

Bad cylinders can cause a lot of wear and vibration and any other part of a frame that is out of balance will cause wear.

I would say that the two main things that cause excessive breaking in a mill are improper installation and vibration.

MR. CLARK: Does vibration come from worn bearings?

Mr. Bozeman: Yes, sir.

MR. CLARK: That is the main cause, is it?

MR. BOZEMAN: Yes, sir. In other words, the main cause is because cylinder bearings get out of balance.

Mr. DILLING: Mr. Chairman, I'd like to ask Mr. Bozeman to name some of the parts that can be metalized successfully.

MR. BOZEMAN: Many parts can be metalized successfully, such as slasher rolls, by spraying them with molten metal, but it is not very good for reclaiming cast parts and of course it does not weld. It is not as good as the acetylene torch for reclaiming cast parts, but it is much better than the acetylene torch for reclaiming a shafting or any part that is worn where you need a non-ferrous metal such as brass twister rolls.

Metalization is mainly for round parts. It is not much good for a flat surface. You can do right well on the internal part but you have to spray only a very small portion of it at a time and then wait until that has cooled off.

Mr. DILLING: Do you have to grind everything—even bronze?

Mr. Bozeman: No; you can turn a non-ferrous metal, but you can get it so hard you can't turn it—and all that has to be ground.

Mr. Clark: What is the best method of repairing gears?

Mr. Dilling: When the tooth is broken out we weld over that, or weld up the space completely across that, (Continued on Page 28)

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Contributions on subjects pertaining to cotton, its manufacture and distribution, are requested. Contributed articles do not necessarily reflect the opinion of the publishers. Items pertaining to new mills, extensions, etc., are solicited.

More Carelessness

The picture surrounding our loss of three heavy cruisers at Guadalcanal is not entirely clear but their loss does seem to parallel the Pearl Harbor incident, in that those in command entirely disregarded notice of approaching Japanese naval units and went to their night bunks without leaving the battle stations more than lightly manned.

One witness states that when the Japs opened fire our three cruisers went down "like sitting ducks."

Witnessing for a second time, in less than a year, absolute disregard by naval officers for even those precautions which should be dictated by common sense, the public is looking with questioning eyes at the Naval Academy and wondering whether the instruction given there has always justified the expense.

There can be no doubt that the Academy turns out many fine officers but the demonstration given by Admiral Kimmel at Pearl Harbor and the action of the commanders of the three heavy cruisers lost at Guadalcanal seem to indicate that some are slipping through who could not possibly pass an ordinary intelligence test.

We have seen an admiral and the commanders of three cruisers go to their beds without heeding warnings relative to approaching enemy forces, and without taking even normal steps to be in a defensive position, and we are wondering

whether or not there are any more like them. God help America if there are many.

Carelessness has not been confined exclusively to military men, for the \$60,000,000 Normandie is half buried in mud because welders were allowed to work above a deck, covered with bags of inflammable kapok, and another great ship recently came back to New York almost completely burned out and its cargo of war materials lost because someone was careless with his cigarette

This war is too grim and the lives of our sailors and soldiers are too valuable to permit more such instances of carelessness as have been reported.

Union Charged With Fraud

On October 21st the National Labor Relations Board was guilty of very unusual proceedings; that is, it set aside a closed shop contract and based it on grounds of fraud and conspiracy.

The board found that certain employees who had sought the protection of the union lost their jobs after the contract was signed and that the union then provided men to replace them.

However, it was not the union but the employer who had to pay, as a New York employer was ordered to reinstate and pay back wages to eight workers and to offer reinstatement to two others after their discharge from military service.

It was testified that the employer, after questioning some of his employees, paid them off and told them, one employer testified, that if he had to "tie up with the union" and "pay union wages," he would "rather have union help" than his present employees.

The board stated that the employees who were discharged had never been actually admitted to the union but had been assured by the union they were "as good as in," but it was evident "that when the parties executed the agreement it was not intended that these employees should be admitted to membership, and that the purport of the agreement was to close the shop against them and to distribute their jobs to non-employee members of the local."

The attitude of the National Labor Relations Board and its policy disregarding fair play and justice is evidenced by the fact that, although the union was the principal in a fraud intended to replace, with loyal union members, those who had joined because otherwise they could not hold their jobs, the employer had to pay the back wages and no penalty was assessed against the union.

Admitting that the employer connived with the union to deprive certain employees of their jobs, he was not the sole principal in the fraud.

The National Labor Relations Board definitely convicted union leaders of fraud, but in keeping with its policy of never doing anything against union organizers, ordered no penalty against them.

Their action was in the same category with catching two men robbing a bank but letting one go free because he was a member of the Methodist Church.

A Remarkable Statement

We could hardly believe our eyes and thought that something must be wrong with our glasses when we read the following:

Washington, D. C., Oct. 27.—President Roosevelt disclosed today that he had directed the chiefs of major war-time agencies to take steps to assure war plants of getting the cheapest possible power.

Franklin D. Roosevelt has been President for more than ten years but we do not recall that in any address or in any statement, prior to the above, that there has been any suggestion of need for economy or an order to get any commodity at the "cheapest possible" price.

During the past ten years, of profligate spending, we do not recall that an effort has been made to buy any article for less than the price asked by the seller.

We have an idea that the sudden desire to buy at the "cheapest possible" price is more for the purpose of swatting certain non-administration producers of power than for purposes of economy.

It is too much to hope that the words "cheapest possible" have found their way back into the administration dictionary.

The Salesmen's Problem

Discussing the problem with which traveling salesmen are faced in attempting to cover their territories on rationed gas and thinning tires, A. H. Deute, in a recent issue of *Printer's Ink*, finds some bright spots in the situation.

"In the first place," he says, "a larger number of men are not going to be traveling at all. They are or will be in war jobs. So the number of salesmen will be cut down. And those who remain will simply go back to the former method of working by train or bus or street car. This slower selling tempo will offer some real advantages. In the first place, the buyer will realize that the salesman made a real physical effort to get to his place of business, and he will be more considerate. And with fewer salesmen to see, he will have more time for each who does call. And

the salesman will have more leisure and more time to make a thorough call.

"I cannot feel greatly disturbed over the fact that our salesmen are making fewer calls. I find that while they are making fewer calls they are making better calls."

If mill executives and buyers are as considerate of the salesmen's difficulties as Mr. Deute suggests, and as we hope and believe they will be, maybe today's salesmen, like the old-time "drummer," will be able to say: "Well, we've been handed a lemon. We're making a lemonade out of it."

And now, we are wondering who will be the first Southern textile salesmen to make the rounds by horse and buggy!

War vs. Automobiles

Statistics show that in the United States deaths resulting from automobile accidents have been about 40,000 annually. In the terrible loss we are to suffer during the war there will be slight compensation through a reduction in deaths from automobile accidents.

Tit for Tat

A few months ago President Frank Graham, of the University of North Carolina, signed the petition for the release of Earl Browder, the communist leader, who was then in a Federal penitentiary.

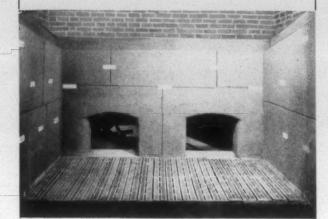
He did so, in spite of the fact that up to the time Germany attacked Russia, Browder had been disloyal to the United States and had presided over several meetings at which the American flag had been spat upon, and tramped upon, while the red banner of communism floated above the speaker's stand.

However, it seems to be a case of "tit for tat," for in a recent issue of *New Masses*, which was devoted almost exclusively to a demand for social equality between whites and blacks, Earl Browder had an article in which he said:

Dr. Frank Graham, president of the University of North Carolina, has built up over years and under most discouraging conditions a powerful center of diffusion of civilization and culture in those benighted regions, helping to make it possible for decent men to begin to speak in public without endangering their lives.

It seems that President Frank Graham, from the "benighted regions," and Earl Browder, to whom Russia in the height of its communism was "heaven," have formed a mutual admiration society.

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MASTER MECHANICS SECTION

INCREASED MACHINE TOOL OUTPUT

The repair of mill machinery is no longer a side line in the textile industry. It is now a most necessary operation. Presented below are some suggestions as to getting the most out of machine tools, offered by the Division of Information of the War Production Board.

PASTER machining and shorter time for setting up work will enable you to get higher production from your machine tools. You can increase sharply your output per machine, in many cases, by using tungsten-carbide cutting tools. Such tools remove stock as much as three times faster than high-speed steels and will cut harder materials.

To secure maximum production from tungsten-carbide tools you may have (1) to install a larger motor on the machine to provide greater power necessary for increased speeds, feeds, and depths of cut, (2) to repair the machine to provide greater rigidity, (3) to select the proper grade of carbide for specific machining operations, (4) to choose proper tool angles and chip breakers for the metal machined, and (5) to provide greater capacity of cutting fluid pumping equipment and proper application of the fluid to the tool's fast-moving chips.

Don't Demand Too Much

Remember, though, that the best-grade cutting tools are sometimes hard to get, and you should not demand cutting tools of a grade unnecessary for the job.

Speeds and Feeds.—The best speed and feed for any metal or material should be decided by experienced machinists or foremen. Operators should adhere to the set conditions.

The table on page 26 gives data on proper speeds and feeds for SAE steels.

Cutting speeds for aluminum alloys, using light cuts, range between 300 and 500 surface feet per minute for high-speed tools and up to 1,000 feet per minute for carbide tools. For heavy cuts up to ½ inch, speeds may run from 150 feet per minute for high-speed tools to 900 feet per minute for carbide tools.

Proper feed often is determined by the rigidity of the part being machined, power available, and finish desired. A change in the work set-up to obtain greater rigidity or the application of more power may permit the use of faster feeds without sacrificing finish, thereby increasing production. Increased machine power often can be obtained by installing individual machine drives in shops

with a preponderance of belt-driven, line-shaft equipment.

Jigs and Fixtures.—Faceplate fixtures for lathes, jigs for drill presses, and table jigs and fixtures for milling machines, boring mills, planers, and shapers can and should be used on production jobs. Set-up time can thus be decreased. Most important, under present production and labor supply conditions, such fixtures permit semi-skilled men to set up work and perform machining operations that otherwise would require the services of skilled machinists.

One means of getting out more work is to have duplicate fixtures for any one machine tool, especially where set-up time is long and machining time is short. For example, on planers and horizontal boring mills, two table fixtures can be employed, one of which is always on the machine with the work being cut, while the other is on the floor or bench being loaded. As soon as the work is machined, the fixture containing it is removed and the second fixture bolted in place. In that way production proceeds without loss of valuable machine time. Such duplicate fixtures have resulted in saving as much as eight hours of machine time in one day.

Have the Job Marked

Another saving can be made by having a layout man mark the job for machining before it is put on the machine. When a job is left for the machine operator to lay out and set up, the time of the operator and of the machine is wasted.

Jigs and fixtures often can be applied to certain machines to relieve congestion on other machines. Example: a trunnion jig, which can be swiveled through 90 degrees, is adaptable to radial drill presses for performing boring operations normally done on a horizontal mill.

Cutting Fluids.—Use of cutting fluids as an aid in increasing production is often overlooked. Your shop may be using one fluid on all machines, to the detriment of the best cutting speeds and feeds on some machines. There is a desirable cutting fluid for each machining operation on each type of metal. A soluble oil may be used with good results on a lathe or boring mill for machining one type of steel, whereas it could not be used satisfactorily when the same steel is cut on an automatic screw machine.

A well-selected cutting fluid often means finer finishes on machined parts, frequently with higher cutting speeds and feeds. Proper cutting fluid helps to prevent distortion of the machined part and limits corrosion of the work. A properly chosen cutting fluid increases tool life.

Speeds and Feeds for SAE Steels¹

(Surface speed, feet per minute)

Steel of c		Feeds, in per revolution									
	Depth of cut,	High-speed steel			Stellite J-metal ¹			Cemented carbides			
	inch	1/64	1/32	1/16	3/32	1/64	1/32	1/16	3/32	1/64	1/32
Group 1	1 22 116 126 126 126 126 126 126 126 126	100-161 91-147 81-131 67-108 47- 76	86-138 80-138 71-115 60- 96 43- 69	70-113 67-108 61- 91 51- 83 39- 62	60-97 57-92 51-83 43-69 31-51	153-246 140-225 126-201 106-170 77-124	132-212 122-195 110-177 93-150 69-110	114-184 106-170 94-152 78-117 59- 94	100-161 93-150 84-136 69-110 50- 80	391-630 371-597 341-552 314-505 226-363	357-575 329-536 300-530 266-428 214-345
Group 2	\$\frac{\frac{\frac{1}{2}}{16}}{16}\$ \$\frac{1}{1}\frac{1}{8}\$ \$\frac{1}{4}\$ \$\frac{1}{4}\$ \$\frac{1}{2}\$	82- 96 75- 88 67- 78 55- 64 39- 45	70- 82 65- 77 58- 68 49- 57 -35- 41	57- 67 55- 64 50- 59 42- 49 32- 37	49-57 47-55 42-49 35-41 26-30	125-146 115-134 103-120 86-101 63- 74	108-126 100-116 90-105 76- 89 56- 66	94-110 87-101 77- 90 64- 75 48- 56	82- 96 76- 89 69- 80 56- 66 41- 56	320-375 304-356 281-328 257-301 185-216	292-342 269-315 246-288 217-255 175-205
Group 3	312 116 148 144 1/2	67- 78 61- 71 54- 63 45- 52 31- 37	57- 63 53- 62 48- 55 40- 47 28- 33	47- 54 45- 52 41- 48 34- 40 26- 30	40-47 38-44 34-40 28-33 21-24	402-119 93-109 84- 98 70- 82 51- 60	87-102 81- 94 73- 85 62- 72 46- 53	76- 89 70- 82 63- 73 52- 61 39- 45	67- 78 62- 72 56- 65 46- 53 33- 39	260-304 247-288 228-266 209-244 150-175	238-277 219-255 200-233 177-203 142-166
Group 4	\$\frac{1}{3\frac{1}{2}}\$ \$\frac{1}{16}\$ \$\frac{1}{18}\$ \$\frac{1}{4}\$ \$\frac{1}{4}\$ \$\frac{1}{2}\$	48- 64 44- 58 39- 52 32- 43 23- 30	41- 55 39- 51 35- 45 29- 38 21- 27	34- 45 32- 43 30- 39 25- 33 19- 25	29-38 28-36 25-33 21-27 15-20	74- 97 68- 89 61- 80 51- 67 37- 49	63- 84 59- 77 53- 70 45- 59 33- 44	55- 73 51- 67 46- 60 -38- 50 28- 37	48- 64 45- 59 41- 54 33- 44 24- 32	189-248 179-236 166-218 152-200 109-144	172-238 159-210 145-191 128-169 103-137

Group 1-High speeds for SAE X1112; intermediate speeds for 1112, X1314, X1315; low speeds for 1115.

Group 2—High speeds for X1015 and X1020; intermediate speeds for X1330, 2015, 2115, 1010, 1015, 1020, 1025, 1045*, X3115, 3120, 3130*, 4815, 4820, 6130*, 1030, 1035, 1050*, X1340, 2330*, 2335*, 3135*, 5140*, 6140*; low speeds for X1025, 2315, 3140*, X4130, 4140*, 4615, 4620, 6135*.

Group 3—High speeds for 1040, $X3140^*$, 3145^* , 3215, 3220, 3415; intermediate speeds for 3150^* , 3312, 4150^* , $X4340^*$, 4640^* , 5120, 5150^* , 6135^* , 6150^* , 1045, 2340^* , 3130, 3240^* , 34340, 4640; low speeds for 1050, 2330, 3135, 6135.

Group 4-1055*, 1060*, 1065*, 2345*, 2515, 3140, 3150*, 6150; intermediate speeds for X1065*, 1070*, 1075*, 1080*, 1330, 1335, 1340, 2340, X3140, 3150, 3240*, 3245*, 3250*, 9250*, 1085*, 1090*, 1095*, 3240, 3245, 3250, 9250; low speeds for 52100*.

¹Data are for continuous cutting with lubricant. ²With stellite "2400" these speeds can be increased 25-30%. *Annealed steels.

Note.—For continuous cuts without lubricant, decrease speeds 25 per cent; for intermittent cuts with lubricant, decrease cutting speeds 15 per cent; for intermittent cuts without lubricant, decrease cutting speeds 40 per cent; for light finishing cuts and fine feeds, cutting speeds can be increased 50 to 100 per cent.



Southern Cotton Mills Hold Annual Elections

Elections of officers have been held recently for several Southern cotton mills, and in most cases the officials in office were re-elected.

At Greenville, S. C., officers and directors of Brandon Corp. were re-elected at the annual meeting as follows: C. E. Hatch, president and treasurer; J. E. Sirrine, vice-president and chairman of the board; Summerfield Baldwin, vice-president; W. B. Perrin, general manager; John I. Smith, secretary and assistant treasurer; Aug. W. Smith, assistant general manager, and L. N. Carlisle, assistant secretary.

Also at Greenville, officers and directors of F. W. Poe Mfg. Co. were re-elected at the annual meeting as follows: Earle R. Stall, president; F. W. Symmes, vice-president, and C. L. Steadman, secretary.

The directors are Summerfield Baldwin, Jr., of Baltimore; Sydney Bruce, of Greenville; G. B. Dorsey, of New York; B. F. Hagood, of Easley; N. C. Poe, Jr., of Greenville; J. E. Sirrine, of Greenville, and Mr. Stall and Mr. Symmes.

At LaGrange, Ga., directors of the Callaway Mills for the coming year were named. They include Fuller E. Callaway, Jr., Harry W. Callaway, H. H. Childs, C. W. Coleman, H. D. Glanton, Hatton Lovejoy, J. J. Milam, James Newsome, J. A. Perry and W. H. Turner, Jr. It was announced that at present 736 employees are now in the armed forces.

Mrs. J. K. Hughes was elected president of the Mexia Textile Mill, Mexia, Tex., at a board of directors' meeting called to replace the late J. K. Hughes. Mrs. Hughes was unanimously elected to head the business her husband founded 20 years ago. She was first named a director and then elected president of the board by acclamation.

At the annual meeting of the stockholders of the Anderson Cotton Mills, held at the company's office in Anderson, S. C., F. E. Greer of Greenwood was re-elected president and J. R. Abney of Anderson re-elected treasurer. All former directors were re-elected, with additional members of the board as follows: R. E. Venson, New York; E. W. Seigler, Greenwood, and W. Herbert Seigler, Anderson.

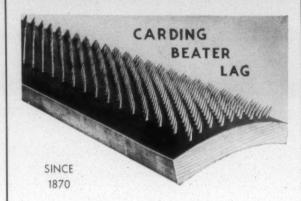
Spindles Busy in September

Washington.—The Census Bureau reported Oct. 20 that the cotton spinning industry operated during September at 134.9 per cent of capacity, on a two-shift, 80-hour-week basis, compared with 136.4 per cent during August this year, and 123.7 per cent during September last year.

Spinning spindles in place Sept. 30 totaled 23,924,456, of which 22,956,224 were active at some time during the month, compared with 23,954,922 and 22,973,572 for August this year, and 24,271,952 and 22,963,944 for September last year.

Active spindle hours for September totaled 11,190,894,482, or an average of 468 hours per spindle in place, compared with 10,981,479,323 and 458 for August this year, and 10,406,906,124 and 429 for September last year.

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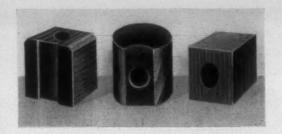
It means that you can speed your production for the war effort by making use of all the knowledge we have gained on needle-pointed specialties for the preparation of wool and other fibres. In all the field—no plant like this—no such rich fund of experience—no such quality. Your inquiries will receive emergency attention.

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Lags—Gills—Tenter Plates

Rolls—Faller Bars
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Use in—
Jute and Flax Cards
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Carding Beaters
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Covington Retires As Wade Mfg. Co. Superintendent

WADESBORO, N. C.—I. B. Covington, vice-president and superintendent of the Wade Mfg. Co., was granted a request that he be relieved of his duties as superintendent at a meeting of directors of the firm held Oct. 21. He will retain his positions as vice-president and a director of the company.

T. D. Flack, who for years has been connected with the firm, is now superintendent.

Mr. Covington has been superintendent of the Wade Mfg. Co. since it began operations in 1923 and is one of North Carolina's best known cotton mill men. Before coming to Wadesboro he held a superintendent's position in Forest City, N. C.

His reason for retiring is to regain his health. He will continue his residence in Wadesboro.

At a stockholders' meeting preceding the gathering of directors a successful annual financial report was given, and the directors and officers were re-elected for another term.

Auguste Richard Takes U. S. Post

Henry M. Bliss, president of Pacific Mills, announced recently that the board of directors has accepted the resignation of Auguste Richard as vice-president and director to coincide with the acceptance by him of the chairmanship of the Army and Navy Munitions Board. Mr. Richard's headquarters will be in Washington, D. C.

J. E. Bradley, merchandise manager of the cotton and rayon division, has been appointed general manager to succeed Mr. Richard as head of the division. Mr. Bradley's headquarters will be at 214 Church street, New York City.

Talcott Profits Reported

James Talcott, Inc., textile and general factors, reports estimated net profit for the first nine months of this year, after Federal income taxes at the rate of 40 per cent, of \$415,769 compared with \$370,521 for the corresponding period last year. After regular dividend requirements on the 5½ per cent participating preference stock, this is equal to \$1.10 a share on the 322,056 shares of common stock outstanding compared with 96 cents a share for the corresponding period of last year.

Broken Parts Are Discussed At S.T.A. Piedmont Section Meeting

(Continued from Page 20)

solid, and then we put that gear in the gear-cutter and recut the teeth for that part of it, and often we can get a gear that is just about as good as new; and other times it will not work so well, depending upon the strain on the gear.

Mr. Clark: Are you speaking of broken teeth or where they are worn down?

MR. DILLING: I am speaking of where the teeth are broken. Where they are worn down we have never found

it practical to do anything about it—that is, if the teeth are worn down all the way around.

CHAIRMAN: One thing which I have noticed is that we don't have the broken gears on pickers that we used to have. Have you noticed that, Mr. Pegram?

MR. PEGRAM: Yes, sir, CHAIRMAN: Mr. Corn?

Mr. Corn: Yes.

CHAIRMAN: What is your experience along that line. Mr. Cauble?

Mr. Cauble: Well, frankly, I don't know that I can tell very much difference in the picker, because the only , place in the card room that we are troubled with the gears is on the pickers.

CHAIRMAN: That's the place where most of the mills have their big trouble, but I have noticed that we do not have as much trouble there now as we used to have.

MR. DILLING: Some pickers don't run as fast as formerly, and on some of the newer models we have steel

CHAIRMAN: Yes, and another thing—we clean them and overhaul them more often than we used to. That may be another factor

MR. CORN: The stock, as a usual thing now, is in much better condition than it used to be.

MR. DILLING: At one time, with one-process pickers. we had three calender heads, and that's where your trouble is: in the calender head. In our new method, we only have one section instead of three and therefore we have only one-third of the breakage in your calender section that we formerly had when we had three processes.

MR. CLARK: Are you using a metal apron?

Mr. DILLING: No.

MR. CLARK: I have seen one or two mills using them and it seems to be quite an improvement. I think that has cut down their fires considerably and also their re-

MR. DILLING: I think the most important feature of the metal apron is the fact that it will not burn.

MR. CLARK: I was in a mill recently where they had made an offset and placed a grid so that practically all of the things that had been causing fires are now dropping through the grid and they have reduced their fires.

A MEMBER: They have made some kind of a "catch basin"-is that right?

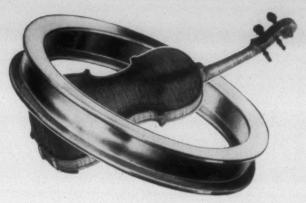
MR. CLARK: Yes, and in that catch-basin nails and all such things drop through and do not reach the beaters. They say their fires have been cut down tremendously as a result.

Mr. Corn: And also some are putting in a magnet to catch those metal parts.

MR. CLARK: In regard to the bolts. If a thread strips on a three-inch bolt, some cut it down and rethread it.

CHAIRMAN: And make a shorter bolt?

MR. CLARK: And make a shorter bolt, yes, and they say they save considerable expense thereby.



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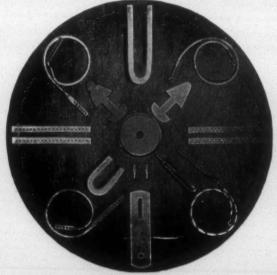
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Dary Ring Traveler Co. Dunkle & Co., Paul A. Dunning & Boschert Press Co.	3
Eaton & Brown	-
Eaton & Brown	- 0
Engineering Sales Co	- 2
—F—	
Fulbright Laboratories, Inc.	1
Garland Mfg. Co. Gossett Machine Works Greenthachine Works	
Conland Mer Co	10.
Clarianu Mik. Co.	. 0
Gossett Machine Works	0
Greensooro Loom Reed Co.	43
Greenville Belting Co	3
—H—	
Hart Products Corp.	
Houghton Wool Co.	1
	10
Ideal Machine Co.	_ 2
Ideal Machine Co. Iselin-Jefferson Co.	3
—J—	
Lablas Watel Co.	2
Jenkins Metal Co.	
Johnson Chemical Co.	_ 2

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Stanbare Inc. P. C.	30
Stanhope, Inc., R. C.	1
Stein, Hall & Co. Stevens & Co., Inc., J. P.	3
	100
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Terrell Machine Co. Texwood Mfg. & Sales Co.	3
Texwood Mfg. & Sales Co	21
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Valentine & Co., J. W.	3
Valentine & Co., J. W.	01
Veeder-Root, Inc. Back Co- Victor Ring Traveler Co.	2
Vogel Co., Joseph A.	4
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-W-	
WAK Industries	1
WAK Industries Walker Mfg. Co.	3
	3
Wellington, Sears Co. Whitehead Machinery Co., Troy Whitin Machine Works	3
White Machinery Co., Troy	- 5
Whitin Machine Works	- 0
Whitehead Machinery Co., Troy Whitin Machine Works Whitinsville Spinning Ring Co. Windle Co., J. H.	2
William Co., d. II.	9

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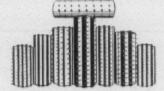
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Cotton Goods Market

New York.—Large Government orders have drawn a major share of attention in the cotton goods market during the past fortnight. Flare parachute cloth for the Army and 50 million yards of sandfly bar are the two main items.

Military commitments have monopolized practically the entire movement of goods. More and more contracts coming out of the various Quartermaster Corps depots, together with other priority rated items, are being absorbed as the weeks pass.

Since this tempo has kept up in recent weeks, mills are rapidly getting to the point of being sold up through the first quarter of 1943.

Army demands for goods from cotton textile mills are following along with the plans for expanding the force from 4,250,000 men to a personnel of 7,500,000. Recent requests for textiles bear out this belief, as well as the contention that all types of fabrics are equally important in this world-wide conflict.

Excitement over the placement of these large contracts has subsided somewhat, following the long period of waiting, and mills are now taking orders in their stride. A good amount of business is being negotiated quietly, but the undertone reflects the huge amount of yardage that is involved in these transactions.

Large demands for certain types of cotton textiles has necessitated switching to others, with the result that a tightening in supplies of all kinds of cloth is now taking place all along the line.

Inquiries for merchandise have been persistently strong, both from holders of priority rated orders and regular civilian consumers. The latter classification again failed to receive any attention worthy of comment, and buyers accustomed to the treatment took the situation stoically

A reluctance on the part of some selling houses to take on commitments too far ahead is evident, buyers state. Until the Government completes the greater part of its purchasing program, mills are believed unwilling to distribute to regular users in any large amounts.

Varied views have been expressed with respect to the uses to which the parachute cloth can be put, how much yardage is involved, and what disposition will be made of the unused portion of the yarn.

One opinion, however, appears quite general, and that is that the mills will not pull out the warps now on the looms, but will continue weaving until they have provided a certain amount of their contracts, or else continue operating until a certain date. Many believe that the Government has already made provisions to take up the cloth in process and not let looms remain idle or abruptly cut off.

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Cotton Yarns Market

Philadelphia.—Sales of cotton yarns during October for both military and civilian purposes were reported to be substantially increased over those a year ago. Sale yarn production is up approximately 25 per cent as compared with October, 1941, but output averaged less per spindle last month than in July, and falls still further below that of the past April.

Reports indicate that the reduction of sale yarn output efficiency is most pronounced in the higher-grade yarns, carded as well as combed, and this is where production can least be spared. This seems to reflect the change that has come over the yarn mill labor supply situation since the early part of the year, and also the effect of price reg-

The sale yarn industry has seldom or never been confronted with more uncertainty than it is at present. Spinners have reacted generally to this condition by limiting the degree to which they will agree to deliveries beyond Jan. 1, 1943. It is to be expected that the trend now being witnessed will continue at least through the first quarter of next year.

Spinners who distribute directly to consumers are reported as having an advantage over those selling through intermediate distributors, in that they have a ready market for all the civilian yarn they can produce and by selling direct they save the commission. It is indicated that numerous buyers are now offering business to direct sellers for the first time, trying to establish connections especially with sources whose product is of uniform quality and whose delivery arrangements can be relied on. It also is explained, however, that such connections are difficult to make because Government contracts are first taken care of, and regular customers have to be accommodated when possible.

On business taken from civilian consumers, most spinners of coarse carded ply yarns seem to be anxious to avoid obligating themselves for new deliveries beyond 90 days. This includes some sources which, according to local reports, need additional orders quickly.

But, veteran suppliers predict that by mid-winter the wanted deliveries in this carded group of counts will have become more difficult to get. That is, civilian buyers should be taking steps now to protect their probable needs through next March.

It is estimated that upward of 5,600,000 pounds of high-break combed cotton yarn will be needed to make the 50 million yards of mosquito netting on which the Army recently received bids.

J. W. Valentine & Co., Inc.

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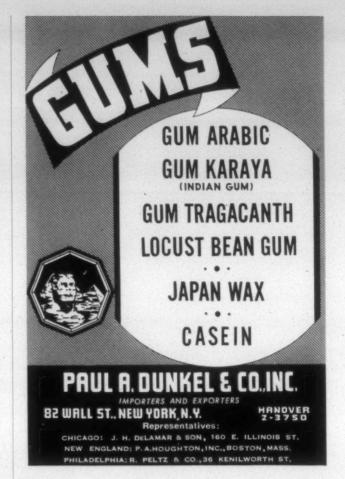
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OUR MOTTO: QUALITY AND SERVICE AT A MINIMUM COST Has realized thousands of repeated orders

The Cotton Textile Industry's Problems and Needs

(Continued from Page 8)

pound. Such a differential, or anything approaching it, will place the American industry at a hopeless disadvantage in foreign competition. A rapid expansion of the textile industries of China, India and Latin America would be inevitable. And England of course would be expected to resume her high position in world textile trade.

The result for us would be a two-edged sword. No export trade in cotton textiles could be maintained except through high Government subsidies. But, in addition to this, our own home market would require a degree of protection greater than we have previously had if the industry is to continue to operate.

Wage Differences

In addition to the higher price paid for cotton American mills will, at the war's conclusion, be paying wages from two to ten times higher than the wages paid in other countries. If post-war policy contemplates a lowering of tariff protection and a reduction of trade barriers from the point of view of established practice the vulnerability of our industry is obvious to anyone. If that sequence of events is permitted to occur without any offsetting developments American industry is doomed to an eventual depression more serious than that of 1931-32 or 1938.

We certainly do not wish to find refuge in wage cutting, or in slashing the price of cotton. Fortunately there is an alternative refuge in our own resourcefulness and ingenuity in raising cotton to higher levels of peace-time consumption in the United States. For this task we must employ as never before the twin magicians of science and promotion.

During the past few years approximately 650,000 bales of cotton have gone annually into the production of automobile tires. A few years ago, probably not more than five or six, a high tenacity rayon suitable for tires did not even exist. Not until about two years ago was it even heard of outside of technical circles. Yet during the past few weeks we have witnessed the amazing spectacle of the repudiation of cotton tire cord for Army purposes, and the ordering of an enormous expansion of rayon production even at the cost of diverting eight or nine million pounds of strategic war materials in order to supply the Army with rayon cord tires.

No Facts To Offer

Those who are familiar with the tire situation know that this development promises to wipe out at one stroke ten per cent of America's normal peace-time consumption of cotton. For the purposes of this statement I express no judgment whatever as to the merits of that decision. But I can say that it involves fierce controversy and a deplorable lack of scinetific evidence. Cotton was put on the defensive in this instance, and may have lost a major battle in its history, not necessarily because it was inferior for a given purpose but because it did not have the verified facts of the type which were essential to win its acceptance under the prevailing circumstances. Science, working impartially and unfettered on this problem,

might have saved the American farmer and the American industry untold millions.

Science, to do the job that should be done for cotton, must begin on the farm with the breeding, the cultivation, and the preparation for ginning. Next, it is needed in the analysis and in the chemical and physical treatment of the raw fibers. It is needed in the blending of selected fibers to assure predetermined yarn qualities. It is needed in the refinement of machinery and in the mechanical aspects of all degrees of processing. It is needed both in the materials and in the methods of finishing for the dual purpose of utility and fashion variety.

Nurtured by science in this manner through its entire life history, cotton can be transformed and revolutionized beyond our present dreams. We will not then have to worry greatly about what to do with two or three million bales of surplus cotton, or the inroads of foreign compe-

Promotion Important

But where science leaves off promotion must begin. In a time like this cotton promotion cannot be defined as merchandising effort. Cotton promotion now is the building of faith in cotton. It fosters an understanding, a knowledge of its qualities, an appreciation of its charm and usefulness. It would remove the old fallacy that cotton is to be taken for granted; that it is for the poor and-like the poor, always with us—something to be used only under necessity, and to be escaped whenever something new is offered to take its place.

Just as we cannot afford to delay action in the protection and advancement of cotton until we come to the bridge, so we cannot afford to delay action, at least in our thinking, regarding certain other bridges which lie ahead. It does not bode well for the future of America to be constantly hearing on all sides the doctrine that we are being borne along by irresistible trends; that capitalism and private enterprise will go down; that state socialism is unavoidable; that the familiar freedoms will perish, and that the world will never be the same again.

It may of course be that these things will happen. Certainly many changes will occur. But they should not happen merely because people say they are inevitable. He who accepts the inevitable will certainly get it. To say that something ominous is going to happen, and that we might as well make up our minds to like it and proceed to adapt ourselves to it is nothing more than defeatism. It it utterly erosive and deteriorating to the mortal fiber of the state. It denies the efficacy of faith and repudiates the courage of conviction which is based on reason and logic.

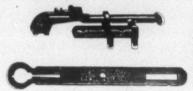
The pendulum of history has never yet stopped for long to conform to the notions of any one group or any one philosophy. We must not confuse the theories and the methods and the concessions which are necessary to the winning of this war with the theories and the methods which are essential to the maintenance of the democratic state after the war is over. Let every man retain his sense of individual sovereignty as an integral part of state sovereignty. Let every man retain his attachment to his personal values. Their temporary submergence by war does not mean that they are futile and meaningless forever. They are our only defense against what people are calling the "inevitable."

Cramerton Award Commemorated

As a souvenir of its receipt of the Army-Navy "E" Sept. 18, 1942, the Cramerton Mills, Inc., Cramerton, N. C., have issued a very handsome book.

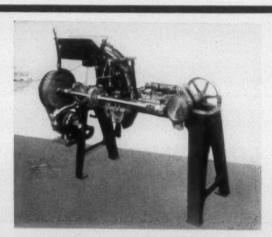
It is profusely illustrated with photographs taken at the time of the award and carries a stenographic report of the proceeding. Numerous pictures of the mill and village are shown. The name of every employee of the mill is listed in the book and each will receive a copy of it.

Listed also are former employees now in the armed services and there are five pages containing reproductions of press notices.



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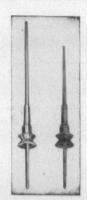


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There Will Always Be a Textile Industry

(Continued from Page 12)

First, research on breeding should be continued and the results of this research should be applied extensively through co-operative agencies.

Second, the raw material as it comes to the mill can very definitely be improved by better handling from the field through the cotton gin. This can be accomplished only by the converted efforts of research-minded men, through the use of scientific methods, and by the correlated efforts of the various groups now established to safeguard the cotton industry as well as the cotton textile industry.

Third, each manufacturing process should be the object of continued study and possible improvement. The textile machinery manufacturers should co-operate with the mills in developing machinery which will give a more uniform product faster and with greater efficiency.

Fourth, economic research should be conducted and an even more vigorous publicity campaign be launched. From the economic research should come information about possible new markets, and the advertising should be used so as to reach these markets effectively.

Fifth, and most neglected, is the study of the physics and chemistry of the fiber. This work must be greatly extended since it is only through such an approach that the cotton fiber may be tailored to a specified need. Much fundamental work must yet be done on the constitution and properties of this raw material. For example, if we could improve the extensibility or elasticity of cotton, this audience is well aware of what far-reaching results would come from such a discovery. Without a doubt improvements can be made in such features as crease resistance, flex life, resistance to abrasion, draping quality of the fabrics, hand or feel, and appearance of certain fabrics. Cotton can be made to replace linen and certain of the best fibers and enter fields where it has never been heretofore.

Already At Work

There are a number of agencies at work at present in such studies. They are doing splendid work on relatively small appropriations and are nominally co-operating at this time. It is to be hoped that this co-operation may be accelerated

There is an appreciable time lag between beginning a research program and producing useful results. Most any worth-while research program we set up will call for painstaking, scientific investigation, and this of necessity takes time. It is obvious that the answers to our questions or the desired results will not be easily found, for products or processes easily found have long since become commonplace. Pursuing a research problem is not like putting up a building. You can't follow a set of blueprints. Although your objective is kept before you all the time, you must travel up many avenues and approaches, only to find a number of them have dead ends. Many interesting things of possible value are encountered all along the way, however. Yes, research of necessity takes times, but when a well-defined program is diligently followed there can be no doubt as to the future of the industry pursuing such a program.

OBITUARY

WALTER T. HAM

Walter T. Ham, 51, an overseer at the Clara Mill of the Gastonia Combed Yarn Corp., Gastonia, N. C., for the past 13 years, died recently after an illness of several months. He is survived by his wife and nine children.

JOHN A. MITCHELL

John Archer Mitchell, 45-year-o'd senior vice-president of the Jordan Mills, Columbus, Ga., died of a heart attack at his home in Columbus Oct. 25.

He was found dead several hours after retiring with the complaint that he felt as if he were taking a cold.

JAMES M. BARKSDALE

James McCarley Barksdale, 59, who was secretary of Lydia Cotton Mills at Clinton, S. C., many years before becoming connected with the textile supply business of Norris Bros., died recently. He had retired from business about six years ago. He leaves his widow, three brothers and a sister.

ROBERT K. WILBURN

Robert K. Wilburn, 68, retired Inman (S. C.) Mills employee, died recently following three years of declining health.

A resident of the Inman Mills community for the past 42 years, Mr. Wilburn was overseer of the plant's card room at the time of his retirement last March.

DUDLEY R. LUTTRELL

Dudley Richard Luttrell, 81, retired textile executive, died at his Jacksonville, Ala., home recently after being in poor health for several years.

Mr. Luttrell lived for many years in Oxford, where he was affiliated with the Southern Mills Corp. He later was associated with the Linen Thread Co. of Anniston.

THOMAS L. LEDWELL

Thomas Lee Ledwell of Salisbury, N. C., died recently after being ill for the past two months.

Mr. Ledwell, who was 54 years of age, was superintendent of the Rowan Cotton Mills in Salisbury. Prior to that, he was associated with the Johnston Mfg. Co. at Charlotte, N. C., for 12 years.

DAVID GESSNER, JR.

David Gessner, Jr., assistant treasurer of the Gessner Mfg. Co., Worcester, Mass., died Oct. 15 after a brief illness. His father is David Gessner, president and founder of the David Gessner Mfg. Co., manufacturers of cloth finishing machinery. The younger Gessner, son of David and Gertrude (Gunther) Gessner, was born in Worcester and graduated from the Textile School of Cottbus, Germany, and the Philadelphia Textile School. He was a member of Phi Psi Fraternity. Besides his parents he is survived by his wife, Margaret Jean, and a son, David Marshall Gessner.

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Savings On Picking-Motion Parts

(Continued from Page 14)

years on some looms. For all-around service, less-troubling adjustments and economical factors this strap reigns supreme. If a fixer finds one of these straps damaged, the most common breakage (which is rare) will be torn out hole ends, or rivets coming out and allowing the end packing to be severely worn or loosening and falling free. In either case, check the loom for pick choking. When a choking pick is pronounced, something must eventually give. If the plug (end packing) falls free, and it is still in fairly good shape, it can be reseated and tightened by inserting a better rivet. If the plug is chewed up considerably and useless, a new plug can be made from good scrap leather by shaping in a vise. If the strap is broken along the sides or the ends torn out, better discard and replace with a new part.

Wooden sweep straps can be made from various hardwoods, such as dogwood, maple, hickory, etc. Cut the material in proper length, drill in the corresponding holes and fit a leather plug in one end as shown in the lower strap, Figure 7. If plugs later become damaged, a new plug is quickly placed in. If leather is scarce, cut a plug from wood and cover the outer surface with leather. One suggestion is not to run wood against wood. Cushion the pressure with leather.

On these improvised sweep straps, if one side should break, the opposite side can still be used. One large weaving plant has these strips made in hundreds, and fixers are furnished with a pack of 12 at a time to avoid frequent calls in the supply room. If his section is kept in good shape, such a supply will last between four to eight months.

Soaking wood straps and sticks in special oils for the purpose is not an absolute requirement, but such treatment will increase the wearing qualities and life by many months. If soaking is done, place approximately a 30-day supply of parts in the oil at one time, making sure to remove all stock before a new batch goes into the oil.

Steel Heddle Mfg. Co. Buys Firm

Steel Heddle Mfg. Co., Philadelphia, Pa., manufacturer of loom harness equipment, recently purchased the business of J. F. Johnson & Co. of Philadelphia. For the past 32 years J. F. Johnson & Co. have been manufacturing precision tools, ordnance gauges and special machinery.

The equipment and most of the employees have been moved into the Steel Heddle building, where the business will be greatly enlarged under the supervision of J. F. Johnson.

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Paul B. Seydel Passes

Paul B. Seydel, 58, president of Seydel, Woolley & Co., textile chemists, died recently in an Atlanta, Ga., hospital.

Mr. Seydel was prominent as a chemist and manufacturer throughout America and in other countries. He was born in Brussels, but gave up his Belgian citizenship shortly after coming to America in 1904, soon after he was graduated from the University of Brussels with a science degree.

He founded the Atlanta Compound Co., which later moved to Jersey City, N. J., and for a while lived in Nitro, W. Va., where a branch of his company was located. The firm changed its name to the Seydel Chemical Co. He returned to Atlanta in 1923, where with Vassar Woolley, Sr., he organized the firm now known as Seydel, Woolley & Co., manufacturers of textile chemicals.

During World War I, Mr. Seydel was among the first to produce the process and the first to put on the market aniline oil, base for many dyes. Previously many such chemicals had been imported from Germany, and England's blockade during 1914-1915 created a shortage.

Mr. Seydel was perhaps most widely known as inventor of a process for making benzoic acid, now generally used in chemical laboratories throughout the country. He also discovered various chemical process now in wide use.

A. B. Carter, Inc., Wins Suit

The case of A. B. Carter, Inc., of Gastonia, N. C., manufacturers of the Boyce Weavers Knotters, against Knotters, Inc., L. W. Cloniger and W. A. Huffstickler, came up for trial in the United States District Court at Charlotte, N. C., Oct. 19, 1942, and by consent of the parties, the court held the patents on the Boyce Weavers Knotters valid and infringed by the defendants.

An order was signed assessing damages against the defendants, and an injunction was ordered enjoining the defendants from further infringement of the patents on the Boyce Weavers Knotters. The acts complained of by the plaintiff consisted in the allegation that the defendants had used parts in the repair of knotters which were not manufactured by A. B. Carter, Inc., and that the defendants had sold parts which were not genuine parts manufactured by the Mill Devices Co., Division of A. B. Carter, Inc.

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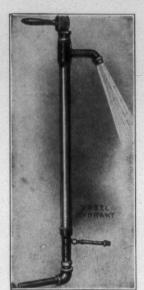
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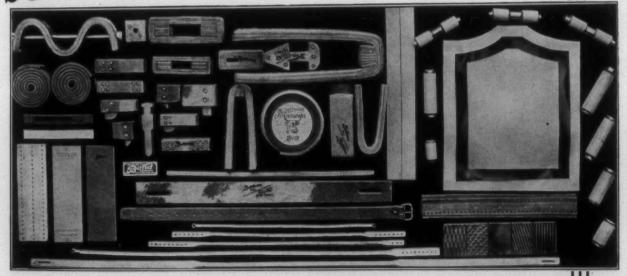
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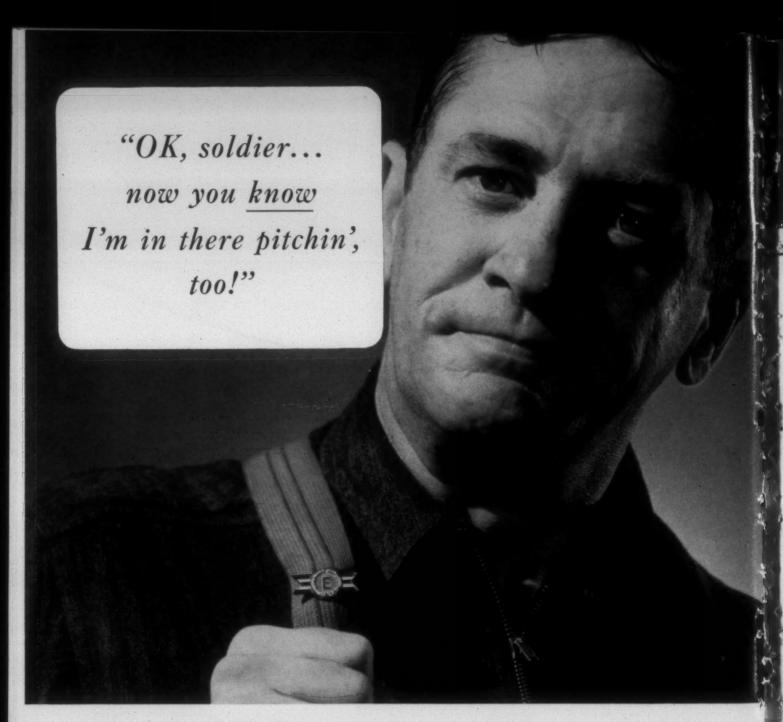
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